SUMMARY OF KEY REVISIONS TO R317-4

1. Reorganizes rules to aid in navigation by following the sequential flow of wastewater from the building sewer, through the septic tank, effluent sewer, and distribution box, to the absorption field. Reduces number of printed rule (reader friendly version) pages from 59 to 55.

2. Adds over 40 new definitions (pp. 3-9 *R317-4-2*)

3. Requires counties applying for Alternative Systems administration to have an ordinance in place to administer these systems, but eliminates the requirement for counties to complete a "Summary of Ground Water Quality Water Management Study" (p. 2 *R317-4-1.5 (A)(1)(c).*

4. Allows off-lot systems located in easements or rights-of-way (p. 9 *R317-4-3.7*).

5. Requires completion of a Feasibility Determination and Plan Review & Permitting to locate onsite systems on raw land (pp. 10-16 *R317-4-4 & 5*).

6. Allows owners of vacant lots that do not intend to build for some time to request a Feasibility Determination to evaluate whether the lot is approvable for an onsite system (pp. 10-14 *R317-4-4*).

7. Reorganizes rules into separate sections for "Design Requirements" and "Construction and Installation" (pp. 16-32 *R317-4-6 & 7*).

8. Allows soils evaluation using USDA classification instead of percolation tests for most systems (p. 10 *R317-4.1 (B)(1).*

9. Presents soil loading rates for dispersal field sizing in two separate tables: 1) sizing based on percolation test results, and 2) sizing based on soils evaluation; and allows reduction credits for non-residential flows with low waste strength (*Tables 5-6*).

10. Clarifies that dispersal areas, including reserve areas, must be protected against activities adversely affecting the soil or performance of the dispersal system (e.g., unnecessary vehicular traffic, construction material storage, soils storage, etc.), and allows a temporary protective barrier to be required during construction and staging activities (pp. 20, 30 *R317-4-7.1 (C)(3)* and *R317-4-6.13 (B)(2).*

a. Need to define the temporary barrier so that someone does not look up the definition of barrier and say I just need some gravel along the edge of the areas.

11. Clarifies that curtain drains should demonstrate effectiveness during the initial site evaluation (p.12 *R317-4-4.1 (B)(3)(b)*.

12. Allows pressure distribution systems as an Alternative System in place of standard gravity dispersal systems (p. 28 *R317-4-6.14 (C)(4)(a)*.

    a. Need to make sure that this may be used is not interpreted as a shall be used except where standard systems are not applicable due to high ground water etc.

13. Increases minimum lot sizes for onsite wastewater systems by 8,000 to 20,000 square feet, depending on soil type, for lots served by public water systems and by one-quarter acre for lots with private culinary wells (p. 40- *Table 1*).
    a. Is there anything in the code that will allow lots to be grandfathered into compliance, say a lot that has public water but was part of a subdivision that allowed 1/3 acre lots way back when. Now the person is getting around to building their cabin, retirement home, etc. and they can't build because they don't have enough land and all of the neighbors already have built on their ground so a purchase of an additional lot is not possible. What happens to this person? In effect, this rule change just deprived them of the intended use of their land without due process.

14. Requires commercial septic tanks to be sized on a working volume of 1.5 times the daily design flow, or 1,000 gallons, whichever is greater (p. 17 *R317-4-6.6(A)(1)*.

15. Requires dosing tank sizing to include a Minimum Operating Volume comprised of dead space, dosing volume and surge capacity, along with Emergency Operation Capacity in the form of 24-hours storage at the design flow, unless a second independent power source (e.g., backup generator) is available (p. 18 *R317-4-6.8(B).*

16. Requires commercial tanks to have effluent filters and requires that they be accessible for servicing (p. 18 *R317-4-6.6(E*).

a. Any thoughts to making the screens mandatory for all systems and not just commercial systems.

17. Requires septic tanks meeting these criteria to have risers (minimum 20-inch diameter, with up to two per tank to access both baffles) to allow access to critical tank components:

    a. non-domestic wastewater tanks, grease interceptor tanks, pump tanks, holding tanks, and recirculating tanks must all have risers brought up to the ground surface (p. 18 *R317-4-6.6(F)(1)(b);* and

    b. domestic wastewater tanks with greater than 2 feet of cover must have risers to within 6 inches of the ground surface but preferred to have all tanks have risers to the finished grade (p. 18 *R317-4-6.6(F)(1).*

18. Establishes a minimum of 6 inches and a maximum soil cover of 48inches over septic tanks. Under unusual situations, allows deeper burial with certain conditions- approved tanks; larger risers (24inches), and; water tightness test performed prior to backfill (p.19 R317-4-6.6 (G)(2).

19. Requires grease tanks for grease-laden wastes located in food preparation areas such as restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and clubs (p. 19 *R317-4-6.7*).

20. Allows pump vaults in lieu of a separate pump tank (p. 19 *R317-4-6.9*).

21. Requires sampling ports for non-domestic and commercial applications (p. 19-20 *R317-4-6.11*).

22. Clarifies that a wastewater design flow of 150 gpd/bedroom is required for single-family dwellings (p. 17 *R317-4-6.3(A*).

23. Requires pretreatment for high strength wastewaters (p. 17 *R317-4-6.4*).

24. Standardizes the minimum wall-to-wall spacing of standard trenches and beds at 7.0 feet (p. 22 *R317-4-6.13(F)(1)(iv).*

25. Increases the maximum length of absorption trenches from 100 feet to 150 feet (p. 22 *R317-4-6.13(F)(1)(iii).*

26. Allows the use of bundled Synthetic Aggregate in trenches (p. 23-24 R317-4 *R317-4-6.13(F)(1)(c).*

27. Increases the vertical separation to groundwater for Deep Wall Trenches and Seepage Pits from 2 feet to 4 feet (p. 25 *R317-4-6.13(F)(3)(h)(i*).

28. Allows Absorption Beds to use Gravelless Chambers, but no reduction credit is given (p. 24 *R317-4-6.13(F)(2)(n)(iv).*

29. Adds a detailed reference to the USU Training Center's "Pressure Distribution Systems" manual (*Appendix B*).

30. Eliminates the use of Earth Fill Systems as an Alternative System.

31. Adds Sand Lined Trenches as an Alternative System (p. 30 *R317-4-6.14 (C)(5).*

32. Defines Sand Media (used in single pass sand filters, mounds, and sand lined trench systems) as ASTM C33/C33M-11A washed concrete sand, which is readily available at many quarry sites (pp. 27, 29, 30 *R317-4-6.14*).

33. Defines final inspection procedures including a new requirement for an 'as-built drawing' of the completed system (pp. 31-33 *R317-4-8.1 (A) through (F*).

34. Adds inspection requirements for holding tanks, requires an annual operating permit and clarifies that dual DEQ/LHD approval is only required under unusual applications (p. 34 *R317-4-10*).

35. Encourages maintenance for Conventional Systems and requires maintenance for Alternative Systems (p. 10 *R317-4-3.9* and *Table 7*).

36. Adds and modifies tables, and regroups all tables at the end of the rules (pp. 40-47):

    a. Table 1- Minimum Lot Size.
    b. Table 2- Minimum Separation Distances in Feet.
    c. Table 3- Estimated Flow Rates of Wastewater.
    d. Table 4- Minimum Standards for Plumbing Sewer, Effluent Sewer and Distribution Pipe Materials.
    e. Table 5- Percolation Testing Minimum Hydraulic Loading Rates.
    f. Table 6- Soil Classification Minimum Hydraulic Loading Rates.

g. Table 7- Inspection Frequency and Components and Effluent Parameters.

37. Adds appendices (pp. 48- 55):

a. Appendix “A”: Septic Tank Construction.
b. Appendix “B”: Dosing Pumps, Controls, Alarms.
c. Appendix “C”: Soil Exploration pits, Soil logs, Soil Evaluations.
d. Appendix “D”: Percolation Method.
e. Appendix “E”: Servicing Septic & Pump Tanks.

Note: use of the term “allowed” or “allows” means allowed at the discretion of the LHD.

Need to have some training with the LHD so that some of these allows or may be used do not turn into must be used and are required except in areas where these are really mandatory and then the text should be shall and must, etc. unless approved by the LHD

Summary of Key Revisions to R317-4.doc

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